

## CERTIFICATE OF ANALYSIS

Product Name: Hesperidin  
 Batch No.: 250703  
 Manufacture Date: Jul. 03, 2025  
 Expiry Date: Jul. 02, 2027

Specification: USP 42  
 Batch Quantity: 1000kg  
 Report Date: Jul. 16, 2025  
 CAS#: 520-26-3

ITEM	SPECIFICATIONS	RESULTS
<b>Characters</b>	Light-cream yellow fine powder, Practically insoluble in water, soluble in dimethyl sulfoxide.	Light-cream yellow fine powder, soluble in dimethyl sulfoxide.
<b>Identification</b> A. Infrared absorption spectrophotometry B. Examine the chromatograms obtained in the Assay by HPLC	Comparison: Hesperidin CRS. The principal peak in the chromatogram obtained with the test solution is similar in retention time and size to the principal peak in the chromatogram obtained with the reference solution.	Conforms Conforms
<b>Loss on drying(731)</b>	≤5.0%	3.1%
Heavy metals	≤10ppm	Conforms
UV absorbance at 660nm	≤0.2	Conforms
<b>Residual Solvents</b> Methanol Ethanol Pyridine	≤3000ppm ≤5000ppm Absent	Absent Absent Absent
<b>Residue on ignition(281)</b>	≤0.2%	0.16%
Bulk density Tapped density	40.0-65.0g/100ml 45.0-70.0g/100ml	55.3g/100ml 59.1g/100ml
<b>Related compounds</b> Impurity: Eriocitrin Impurity: Isonaringin Impurity: Neohesperidin Impurity: Diosmin Impurity: Naringenin Impurity: Didymin Impurity: hesperetin Any unspecified impurity Total any unspecified impurities Total impurities	≤1.0% ≤4.0% ≤1.0% ≤1.0% ≤1.0% ≤3.0% ≤1.0% ≤1.0% ≤3.0% ≤10.0%	0.24% 2.99% 0.61% 0.59% 0.67% 2.18% 0.37% 0.59% 0.13% 8.37%
<b>Assay(HPLC)</b>	<b>90.0-102.0%</b>	<b>91.6%</b>
<b>Particle Size(Laser particle analyzer)</b>	95% pass 80 mesh	Conforms
<b>Microbiological Tests (2021&amp;2022)</b> Total Plate Count Yeasts and Molds Salmonella E.Coliform	<10 <sup>3</sup> cfu/g <10 <sup>2</sup> cfu/g Negative in 1g Negative in 1g	298cfu/g <20cfu/g Negative in 1g Negative in 1g
<b>CONCLUSION: The test results conform to USP 42.</b>		
<b>PACKAGING AND STORAGE: Preserve in well-closed, tight containers.</b>		

Analyst: 06

QC Supervisor: 01